CLAIMS

What is claimed is:

1.   1.   A method for providing access control in a protocol stack, comprising the

2.   steps of:

3.   (a)   receiving a request to perform an operation at a layer of the protocol stack;

4.   (b)   calling an access mediator;

5.   (c)   determining if the request is to be granted based upon a predetermined

6.   security policy by the access mediator; and

7.   (d)   providing the determination by the access mediator.

     2.   The method of claim 1, wherein the receiving step (a) comprises:

     (a1)   receiving the request by the layer to perform the operation on an object by a

subject at the layer of the protocol stack.

     3.   The method of claim 1, wherein the calling step (b) comprises:

     (b1)   calling the access mediator by the layer.

1.   4.   The method of claim 1, wherein the providing step (d) comprises:

2.   (d1)   returning the determination by the access mediator to the layer.

1.   5.   The method of claim 1, wherein the receiving step (a) comprises:

2.   (a1)   receiving the request by a layer manager to perform the operation on an object

3   by a subject at the layer of the protocol stack.

1   6.   The method of claim 5, wherein the layer manager interfaces with each layer

2   of the protocol stack, wherein the layer manager handles data flow to each layer of the

3   protocol stack.

1   7.   The method of claim 1, wherein the calling step (b) comprises:

2   (b1)   calling the access mediator by a layer manager.

8.   The method of claim 7, wherein the access mediator is implemented in the

layer manager.

9.   The method of claim 1, wherein the providing step (d) comprises:

(d1)   returning the determination by the access mediator to a layer manager.

10.   The method of claim 1, wherein the calling step (b) further comprises:

2   (b1)   passing a subject's identity, an object's identity, and a requested operation to

3   the access mediator.

1   11.   The method of claim 1, further comprising:

2   (e)   allowing the operation to be performed at the layer if the determination is to

3   grant the request.

1   12.   The method of claim 1, further comprising:

2   (e)   blocking the operation if the determination is to not grant the request.

1   13.   A method for providing access control in a protocol stack, comprising the

2 steps of:

3   (a)   receiving a request by a layer of the protocol stack to perform an operation at

4 the layer;

5   (b)   calling an access mediator by the layer;

6   (c)   determining if the request is to be granted based upon a predetermined

7 security policy by the access mediator; and

8   (d)   providing the determination by the access mediator to the layer.

1   14.   A method for providing access control in a protocol stack, comprising the

2 steps of:

3   (a)   receiving a request by a layer manager to perform an operation at a layer of

4 the protocol stack;

5   (b)   calling an access mediator by the layer manager;

6   (c)   determining if the request is to be granted based upon a predetermined

7 security policy by the access mediator; and

8   (d)   providing the determination by the access mediator to the layer manager.

1   15.   A system, comprising:

2   a plurality of layers of a protocol stack; and

3   an access mediator, wherein each layer of the protocol stack may call the access

4   mediator to determine if a request to perform an operation at a layer of the protocol stack is

5   to be granted.

1   16.   A system, comprising:

2   a plurality of layers of a protocol stack; and

3   a layer manager, wherein the layer manager is interfaced with each of the plurality of

4   stack components, wherein the layer manager comprises an access mediator, wherein layer

5   manager may call the access mediator to determine if a request to perform an operation at a

6   layer of the protocol stack is to be granted.

1   17.   A computer readable medium with program instructions for providing access

2   control in a protocol stack, comprising the steps of:

3   (a)   receiving a request to perform an operation at a layer of the protocol stack;

4   (b)   calling an access mediator;

5   (c)   determining if the request is to be granted based upon a predetermined

6   security policy by the access mediator; and

7   (d)   providing the determination by the access mediator.